

REMARKS

This is in response to the Office Action mailed on April 6, 2007. In the Office Action, claims 1-24, 26 and 30 were pending and were rejected. With this Amendment, claim 21 has been amended. All remaining claims are unchanged. In view of the following, reconsideration and allowance are respectfully requested.

On page 2, claims 21-24, 26 and 30 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. In particular, it was interpreted that these claims were drawn to a form of energy.

Claim 21 has been amended to recite a computer readable storage medium. It is submitted, as defined in the specification that a storage medium does not encompass a “form of energy” but rather a statutory article. As a result, claims 21-24, 26 and 30 are believed to meet the statutory requirement of 35 U.S.C. § 101. Withdrawal of this rejection is thus requested.

On page 3, claims 1-9, 21-24, and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Buyukkikten et al. (“Seeing the Whole in Parts: Text Summarization for Web Browsing on Handheld Devices”, WWW10, May 2-5, 2001, Hong Kong, hereinafter “Buyukkikten”) in view of Malone et al. (U.S. Publication No. 2002/0038348, hereinafter “Malone”), and further in view of Chen et al. (“Detecting Web Page Structure for Adaptive Viewing on Small Form Factor Devices, WWW2003, May 20-24, 2003, Budapest Hungary, hereinafter “Chen”).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some evidence, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The evidence to make a combination must be found in the prior art, not in applicant’s disclosure.

The method of independent claim 1 recites “identifying segmentation points in the document as a function of the file type” and “segmenting the document into blocks of text as a function of the segmentation points.” For at least the reasons that follow, it is respectfully submitted that the cited references do not teach or suggest these features.

Buyukkokten discloses a method of summarizing text for web browsing on handheld devices. The method of Buyukkokten is utilized after a user has searched the web and selects a particular page to explore in detail (see section 1, para. 3). After a user selects a particular web page to view, the web page is divided into “Semantic Textual Units” (STUs). The STUs are page fragments such as paragraphs, lists, or images description. A keyword and summary are identified for STUs within the selected web page. Buyukkokten is limited to web page documents and does not teach or suggest finding a keyword and summary for an entire document or segmenting a document based on a file type. Instead, the method of Buyukkokten is utilized after a particular web page has been selected for viewing and only operates to fragment the selected web page.

Malone discloses a network for accessing distributed sites. In particular, the cited sections of Malone (sections 49, 50, 52, and 56) disclose site servers having file system assessors that parse data to extract metadata and store the metadata in a common format. Malone further discloses a parser manager that can recognize file format and access file specific parsers. The parsers extract the metadata which can be “so simple as to represent a file name or size or so complex as to represent file author or database schema information.” In other words, the metadata corresponds to information content that is retrievable in response to a search request (see paragraph 13). The metadata relates to file information such as name, size, author, content, etc. While Malone mentions identifying format and parsing documents, there is no teaching or suggestion of identifying segmentation points as a function of file type as Malone does not teach or suggest segmenting documents into blocks of text. The metadata extracted from the documents in Malone is file information for search request purposes and is not configured to be used to segment documents into blocks of text.

Chen discloses a method of organizing a web page for formatting on a mobile device. The web page analysis of Chen extracts semantic structure of a web page and identifies content blocks from the semantic structure. The web page is split based on the structure into sub-pages and a two level hierarchy including a thumbnail representation and sub-pages is generated (see section 2). The page analysis identifies sets of nodes (called “content blocks”) in the hierarchy

for page splitting. Section 3.2.1 describes the method of selecting nodes and includes identifying web page layout tags such as HTML tags and headers and footers. In sum, the method of Chen teaches dividing a web page into sub-pages based on web page commands and features. Chen does not discuss handling documents other than web pages and does not teach or suggest identifying segmentation points in a document as a function of the file type or segmenting a document as a function of the segmentation points identified based on file type.

As mentioned above, to establish a prima facie case of obviousness the prior art references, when combined, must teach or suggest all the claim limitations. The Buyukkokten, Malone, and Chen references all fail to teach or suggest identifying segmentation points as a function of the file type and segmenting the document as a function of the segmentation points. For at least these reasons, it is submitted that the proposed combination of Buyukkokten, Malone, and Chen does not render claim 1 obvious as the combination does not teach or suggest each and every feature recited in claim 1. It is respectfully submitted that independent claim 1 and related dependent claims 2-9, which depend from claim 1, are in allowable form.

Independent claim 21 provides “a document outline parsing module adapted to determine a file type of each of the plurality of documents” and “identify segmentation points as a function of the file type.” The parsing module is further configured to “segment the plurality of documents into blocks of text based on the file type, establish potential segmentation points in the blocks of text as a function of the text, segment the blocks of text if adjacent paragraphs surrounding the segmentation points are dissimilar and form a tree structure indicative of the blocks and sub-blocks.”

As discussed above, the cited references do not teach or suggest, either separately or in combination, identifying segmentation points as a function of the file type or segmenting documents into blocks of text based segmentation points identified as a function of the file type. Further, it is submitted that the cited references also do not teach or suggest establishing potential segmentation points as a function of the text or segmenting the blocks of text into sub-blocks of text if adjacent paragraphs surrounding the segmentation points are dissimilar. For instance, the Office Action cites Chen as disclosing this feature. However, Chen teaches a method for

browsing web pages that involves organizing the web page into a two level hierarchy with a thumbnail representation providing a global view and a second level for displaying the sub-pages. In section 3, Chen discloses identifying sets of nodes in the hierarchy where each node represents a unit of information or a “content block.” Chen further states that at each iteration the page analysis algorithm finds a best way to partition a content block into smaller ones (i.e., section 3, paragraph 2). The remaining portions of section 3 discusses analyzing the web page to determine web page tags such as, visual separators that the author may have embedded in the web page. Thus, the division of a web page into content blocks and sub blocks consists of separating the web page based on the layout tags and structure of the web page. Chen does not teach or suggest establishing potential segmentation points in the blocks of text as a function of the text and segmenting the blocks of text into sub-blocks if adjacent paragraphs surrounding the segmentation points are dissimilar. There is no discussion in Chen of identifying a dissimilarity of paragraphs. For at least these reasons, it is respectfully submitted that claim 21 is in allowable form. Further, it is submitted that related dependent claims 22-24 and 26 are also in allowable form at least based on their relation to claim 21.

On page 8, claims 11-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Buyukkokten in view of Malone and Chen, and further in view of Kadayam et al. (U.S. Publication No. 2006//0259476, hereinafter “Kadayam”). Independent claim 11 recites “identifying segmentation points in each of the plurality of documents as a function of the file type”, “segmenting each of the plurality of documents into blocks of text as a function of the segmentation points”, and “determining at least one keyword and a summary for each of the plurality of documents that is indicative of multiple blocks of text in each of the plurality of documents.” As discussed above, Buyukkokten, Malone and Chen do not teach or suggest, either separately or in combination, identifying segmentation points as a function of file type or segmenting documents as a function of the segmentation points. Further, Kadayam discloses a system for retrieving documents over a network based on a search request. Kadayam also does not teach or suggest identifying segmentation points as a function of file type or segmenting documents as a function of the segmentation points. For at least these reasons, Applicant submits

that claim 11 is in allowable form. Further, it is submitted that related dependent claims 12-19 are in allowable form at least based on their relation to claim 11.

On page 12, claims 10 and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Buyukkikten in view of Malone and Chen, and further in view of Emens et al. (U.S. Patent No. 6,493,744, hereinafter "Emens"). On page 13 claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Buyukkikten in view of Malone, Chen, and Kadayam, and further in view of Emens. It is respectfully submitted that claims 10, 20 and 30 are allowable at least based on their relation to claim 1, 11 and 21.

In view of the foregoing, it is respectfully submitted that all pending claims, namely claims 1-24, 26 and 30, are in allowable form. Reconsideration and allowance are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Todd R. Fronek, Reg. No. 48,516
900 Second Avenue South, Suite 1400
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

TRF:cjv:rdg